plane
GRUMMAN
news

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Build pride, experience into Navy's new fighter

It was John Gazzola, lead man in Final Assembly, Plant 1, who may have struck the proper chord. He was talking of the F-14 and the host of people loaded with production experience gained on previous aircraft. In Gazzola's view:

"We're real proud of the plane, and we've got top people workin' on it. It's like old home week!"

The reference to "old home week" carried a special significance. A long-time Plant 6er, he was pleased to see that "there are a lot of us here."

Working with people you've known down through the years—for Gazzola, 12 of them at Plant 6—makes it easier to acclimate yourself in a home away from home. It provides the "glue" that binds the old with the new; familiarity breeds not contempt but smooth teamwork.

The "glue" is also experience with a capital E: so-called "old hands" who know just about everything there is to know about putting an aircraft together. They've seen the problems—every developmental plane has them—that you have to expect when you're crossing new horizons in the state of the art. And even though each one is a new world unto itself, the trained eye has the best chance of picking up new variations of an old theme. In a phrase, it's know-how.

(Continued on page 8)

Williams, Barton have key posts on LM Operations team at KSC

Two men—Wiley Williams and Dick Barton—now hold top slots in the Grumman Aerospace team at the Kennedy Space Center, according to Chuck Kroupa, director of Operations at KSC.

Williams has been named as director of Lunar Module Operations and will take charge of all test and checkout functions. Barton will serve as deputy director, assisting in the management

Wiley Williams
Director, LM Operations

Dick Barton
Deputy Director, LM Operations

of LM Test Operations, Operations Support, and Quality Control.

Williams has been director of Test Operations for Grumman for three years. He will continue to be responsible for the Company's prelaunch operations, spacecraft checkout procedures, and operational testing and maintenance of ground systems to support spacecraft servicing and checkout. In addition now he'll be in charge of Grumman's technical, logistic, and QC people at KSC.

After two years of duty in Korea in the Army Signal Corps, he spent six years with the Navy in the Mine Defense Laboratory, Fla., followed by two years at the Army Ballistic Missile Agency, Cape Canaveral. In 1962 he joined NASA and was manager of Gemini/LM Operations when he came to Grumman.

Barton, a retired Air Force colonel, came to Grumman a little more than two years ago, and served as director of Support Operations on LM at KSC. His duties covered configuration management, specification control, engineering release, reliability engineering, preventive maintenance engineering, calibration, ground support equipment and facility support engineering, logistics, and manufacturing and planning.

He was chief of Operations and Training for the First Missile Division in 1958, and from 1959 to 1962 he commanded a missile training squadron and a Strategic Missile Squadron at Vandenberg Air Force Base. He served as deputy chief of the Requirements Division, director of Operations, Headquarters, Strategic Air Command, from May 1962 to March 1964. There he was responsible for the management of the SAC ICBM ground and flight test evaluation programs for Atlas, Titan, and Minuteman weapon systems.

plane GRUMMAN news

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Follow-on for F-111

Al Lemlein, F-111 Program manager, announced the award of a follow-on Air Force contract from General Dynamics (Purchase Order 300 effective July 1) for 24 sets of F-111F aft fuselages, stabilizers, and nose and main landing gears, with an option to buy 16 more.

The new order is in addition to the current F-111 (P.O. 200) contract that runs through May of 1971. The new purchase order will follow in June, with the program continuing through September 1971 at the rate of six units a month for aft fuselage deliveries. Stabilizer and landing gear production will coninue through October 1971.

If the Air Force exercises its option, 16 more sets will follow.

"The new order for 24 brings to 546 the number of aft fuselages, stabilizers, and landing gear sets that will have been built by Grumman under F-111 contracts," Lemlein said last week. "And we are proud of the great contributions made by our associate contractors and by the Grumman personnel in our plants, on and off Long Island, who are assisting in the program. In turn, we've had very good relations with General Dynamics in Fort Worth, the F-111 prime contractor."

New Hawkeye readied

A program that has received $105 million in Navy funding to date is moving right along in Plant 4, with action scheduled for next week that could well result in a production commitment.

The Defense Systems Acquisition Review Council (DSARC) meets in Washington July 30 to review Grumman's E-2C Program, and on its decision hinges the production commitment for 1971.

Two E-2A aircraft are in Plant 4 being updated with new secondary structure and all new avionics to make them "updated flying radar stations" for flight test development purposes. "They perform the same AEW mission as the E-2A, but the E-2Cs will be more reliable, and faster at detecting targets," Barnard said.

The E-2C is a five-place plane, with pilot, co-pilot, two air controllers, and a radar tech. In outward appearances they are not very different from the E-2A, but they are getting completely new avionics systems, will have a higher availability rate (there will be less down-time for maintenance), will be able to fly more varied missions, and will have a greater detection capability.

Navy group takes look ahead for EA-6B spares

Grumman was host recently to a team of Navy civilian and military representatives during a two months' provisioning conference for the EA-6B aircraft. The visioning conferences are the initial inactivities, were here to ensure that the Navy will have the necessary material support to effectively operate and maintain the EA-6B aircraft. Their prime responsibility was to determine the spare assemblies and repair parts requirements for support of the aircraft. Provisioning conferences are the initial introduction of the majority of items into the Navy Supply System.

During the two months (May 19 - July 17) of the EA-6B Provisioning Conference, the Navy representatives pored through volumes of blueprints, listings, catalogs, technical manuals, records, and other documents in the Supply Operations' conference room on the second floor of Plant 30. Annotating various codes and percentages while asking questions of Grumman personnel, they generated thousands of decisions on some 103,000 separate items that were presented for review and consideration at the conference. Their determinations will be the basis for subsequent procurement by the Navy to support the EA-6B aircraft, which will result in spares and repair parts business for Grumman.

The conference was presided over by Ellis Simons, Provisioning Conference Team chairman of the Navy Aviation Supply Office in Philadelphia. Roland L. Olsewski, EA-6B Program Supply, Plant 34, was the overall conference coordinator for Grumman.

Supply Operations' personnel worked months in advance of this conference to obtain the necessary provisioning requirements such as blueprints, parts breakdown, vendor data, catalogs, standards, technical manuals and necessary documents.

For Grumman, the conference required close cooperation all along the line—Engineering, Maintainability, Support Program Management, Product Support, Data Systems, Business Office, etc.

The purpose of the program was to develop a comprehensive maintenance and support plan for the EA-6B and to generate requirements for items of supply, which are determined under the team concept. By accomplishing these objectives, the Navy-Grumman group is ensuring that the proper airframe spares and repair parts in the required quantities will be available in the Supply System for support of the EA-6B.

Wind-up. Close to two months of arduous work went into provisioning conference on EA-6B. Here, five of the participants, Jim Tracey, Ellis Simon, Ray Henry, Vern Hunt, and Joe Rocks are pictured during one of the sessions.

'Determined to win,' says Kelly of Space Shuttle effort

The pace at the Grumman Space Center in Bethpage is fast—and getting faster—as engineering teams apply their space-age experience and inventiveness to the Space Shuttle Phase A study. "We're determined to win, and so are our competitors," Tom Kelly, deputy director of the Space Shuttle Program, said the other day. "It's an extremely competitive situation, but Grumman is highly qualified, and we've got the best team in the business working on this."

Kelly and Project Engineer Dick Kline were sitting in Kelly's office on the third floor of Plant 25, following a day-long meeting July 14 with representatives of the National Aeronautics and Space Administration—the customer. "They approved our study plan," Kelly said. "We're off to a good start."

Noting that the Shuttle is the next manned space effort visible on the horizon, Kelly pointed out the importance, in dollars and jobs, of being able to continue on into the next two phases of the Space Shuttle Program: a year of advanced design work, followed by the hardware. "We're aiming at BIG, NEW business, something in the order of TWO LM programs, in the next two or three years," Kelly said.

The tone of the interview continued optimistic, and Kline added, "It's challenging—and it's also very interesting."

Kline is in charge of the engineers working at top speed on three Space Shuttle concepts. Grumman's $4 million funding from NASA is for these three Shuttle recommendations proposed by the Company last spring.

Boeing associate

To wring these out, Grumman, teamed with Boeing as major associate contractor, is beginning by considering 25 different configurations. Within the next four months, they will narrow that choice down, and from December 1970 to June 1971, everyone on the Program will be concentrating on one system to be recommended to NASA. Low-cost solutions are the basic consideration: cost not only in terms of original expenditure, but in terms of maintenance and refurbishment.

Fred Raymes, one of two assistant Program directors, is coordinating the NASA-Grumman Phase A Shuttle study. He and Kline work very closely with Bob Watson, Al Hunt of Boeing, and Gray Smith, who are in charge of the three study concepts that Grumman proposed to NASA as alternates to the "Phase B" reusable booster and orbiter:

- **Concept A** (Watson): A "stage-and-a-half" reusable orbiter-type vehicle with solid rocket motors and/or droppable propellant tanks.
- **Concept B** (Hunt): A reusable orbiter launched on an existing expendable booster (such as Boeing's Saturn 1C), or on a new minimum-cost first-stage liquid- or solid-propellant booster.
- **Concept C** (Smith): A completely reusable booster and orbiter, emphasizing existing Apollo and aircraft kinds of hardware, and existing J-2S engines. (Retrofit for future performance as engines are updated.)

The deputies to Grumman's Watson and Smith are engineers from Boeing, in residence for the Shuttle Program. John Karanik is Grumman deputy to Boeing's Hunt. "We're working closely with Boeing and finding that their experience and approach blend in very well with ours," Kline said.

Supporting the Shuttle effort is an in-house study headed by Assistant Program Director Howard Wright. His role is to marshal all the resources of testing and techniques developed through Grumman's technological leadership in aircraft and spacecraft. Shuttle requirements will make unprecedented demands on experience and inventiveness.

The bright orange décor of the new reception area on the third floor of the Space Center, and a new Control Room nearby where the pulse beat of daily progress is recorded and forecast, are two visible indications of a bright, brisk, well organized Space Shuttle Program.

Be a 'good neighbor'

Hey! Remember those great, active, footloose, sometimes zany days when you were just a kid? Not a care in the world—and how you enjoyed it! And why not?

Other kids are livin' those wonderful days now—but there's a difference: Society just ain't what it used to be. The old dirt roads and the narrow quiet streets have, for the most part, turned into a "system" of multi-lane speedways and noisy traffic jams. Progress—but look again: How about **today's** kids?

Well, they've got to live with what we've created, even though the danger level has been multiplied many times over. The wide open spaces have gone, and with it, safety. That's particularly true during the golden months of summer when school and homework are put aside for the whims and delights of fun, fun, fun.

So we Grummanites should be alert to The World of the Young. Take just a bit more caution-tonic when you're using the roads, whether in residential areas near our plants or in your own neighborhood.

The kid you save may be your own.

ESOT. A monitoring panel and the chamber for carrying a beating heart and lungs (animal, in example shown) were improved by applying aerospace techniques. The Extra-Systemic Organ Transporter is useful for organ research as well as for maintaining live heart for transplant. Grumman's Houston personnel added to unit originated by Baylor College of Medicine.

Space 'spinoffs' being developed at Houston to aid heart patients

Two dramatic examples of space "spinoff"—medical units that have the potential for saving the lives of heart patients—are being developed at the Grumman facility at Houston.

The first, a portable cardiac preservation unit for keeping alive a beating heart, was shown at the annual meeting of the American Medical Association this year; it was developed originally at the Baylor University College of Medicine in Houston.

In heart transplant operations a very big problem in the past has been to have a compatible donor and recipient available at the same geographic location. The Grumman-Baylor preservation unit, also called the Extra-Systemic Organ Transporter, or ESOT, was designed to keep organs functioning over a period of time (hours, or even days), and to move them for perhaps a considerable distance, when donor and potential recipient are not in the same area.

"Grumman provided this design as a demonstration of application of space technology to medical uses, at no cost to the Baylor medical group," Senior Vice President Joe Gavin, director of Space Programs, said last week. Dick Fox and his spacecraft engineers teamed with Frank Baerst and his production men at Houston "to improve the 'package' and reduce the weight," reported Jack Buxton, Grumman's manager of Houston operations.

"For example, a Grumman suggestion," added Buxton, "was a nylon hammock to suspend lungs and heart within the chamber and a spray fog ring to maintain the required 100 percent humidity. Previously, the organs had been immersed in their saline solution and had become 'waterlogged'. Grumman was also able to put to good use its monitoring and fabrication experience gained in the space program," Buxton said.

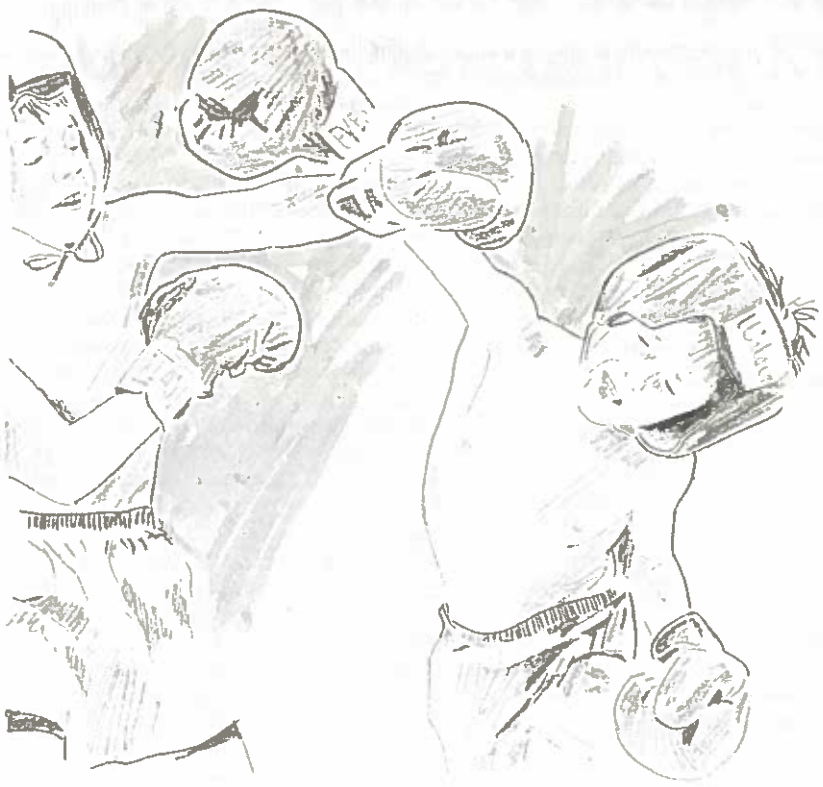
The preservation unit promises to be particularly valuable in cardiac and other research, offering a means of maintaining a living human or animal organ under the most carefully controlled conditions. Cardiac metabolism and function can be studied, and effects of drug or blood administration.

Joe Gavin foresees a number of complex medical devices that could be improved by applying the new technology of manned space. "We see this one as a prototype demonstration — something that may represent a very interesting pioneering effort," he emphasized.

As a second step in the Grumman-Baylor space-medical relationship, Grumman is now investigating a Mobile Intensive Care Operating Table (MICOT), a self-contained unit for the transporting and continuous monitoring of heart attack patients.

•

The chamber for preserving a live heart and lungs, developed at Baylor College of Medicine and built into a highly sophisticated machine by Grumman, won first place for the best scientific exhibit at the annual meeting of the American Medical Association in Chicago. For "original investigation, and judged on originality and excellence of presentation," the Ludvig Hektoen Award, a gold medal, went to the Baylor College of Medicine exhibit featuring the Grumman Extra-Systemic Organ Transporter (ESOT).



The Grumman Family Picnic—another 'socko' affair

Kids to the left of you, kids to the right of you—kids all over the place—running, playing, laughing, climbing, squealing, singing, dancing, eating, sipping soda . . . kids and more kids, livin' it up . . . even (and perhaps most important) kids in their forties and fifties lighting the sparks, however brief, of those wondrous days when they, too, were young.

That was Saturday, July 18, the time of Grumman's 30th annual Family Picnic, Outing, Potlatch, or whatever you want to call the festive occasion. As usual—how many times has it not been so?—the gods smiled and bathed the green landscape in sunlight and warmth.

Things began early. There are reports of cars lined up at the fences of Calverton's picnic area as early as 6 a.m.

"It's fantastic!" voiced an incredulous picnicker as his eyes took in the scene. "What some people will do for a . . . " His vocal apparatus trailed off into silence, for wasn't he one of those people?

Marvelous was the sea of cars, and what came out of them (including, of course, people—some 25,000 or more): cooking and camping equipment, beach chairs, wooden and metal and fabric lounge chairs, blankets, cribs, playpens, beach balls, footballs, softballs, multicolored balloons, fabulous hats, grills, radios, at least one croquet set and one medicine ball and one archery set and . . . well, items without number. The art and science of packing has indeed come a long, long way!

Repacking at day's end is quite another challenge . . .

Would you believe that lines began to form for rides on the renowned mini-trains by 7 a.m.—a full hour ahead of schedule? (Do the kids know something the LIRR doesn't?). The heavily burdened picnickers arriving about 8:30 a.m. were stragglers of a sort, hunting for tables not yet occupied? That many a dad (sturdy fellow!) had eaten by 8:30 or 9 a.m. and was somewhere off in dreamland with a built-in snorer? That a full head of steam had been generated very early in the day, and that the kiddies-in-perpetual-motion were still going strong long after mom and dad got on the extensive list of pooped participants?

Yes, Virginia, there really was a picnic!

"Mrs. Carruzzo, we have two of your children at the paging booth." Thus came a voice over the PA system. Underneath it all, or woven in with it, was a current of hubbub, of muted hurdy-gurdy, somehow always present.

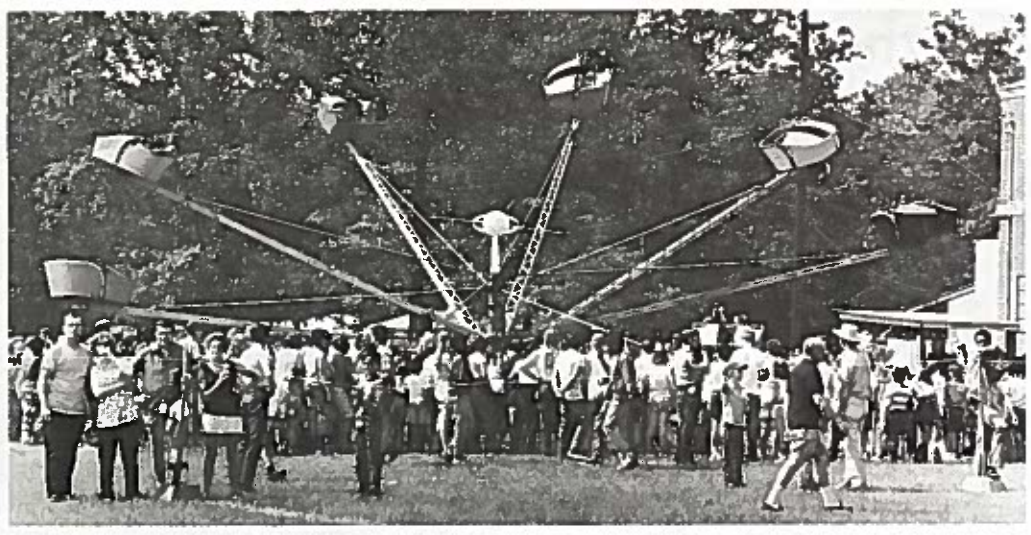
Wheeee! The Octopus moved into action—up, down, 'round and 'round, little eyes agog.

Hey! Free hot dogs loaded with mustard and relish, milk, ice cream, soda, and that creamy liquid with foam on top. Action, all over . . . and a tiny baby content to ignore the whole affair and opt for slumber.

Background music, then, at 10, the official opening of the Outing. The Huntington Thunderers Musical Twirling Corps—Grand National Champions last year, by the way—provided a dramatic prelude to the flag-raising ceremony with some smart precision stepping. Everything on the picnic grounds (except the squeaking swings) came to a halt as Vice President Tom Rozzi and Picnic Chairman Gus D'Errico hoisted the Stars and Stripes. Walt Latinski sounded the Call to Colors, Al Kordula's talented musicians struck up "The Star Spangled Banner"—and hubbub hubbubbed again.

Soon there was dance music, a band concert, games, and races. Rock 'n' roll

Picnic photos by Larry Van Wallendael and Dick Sander



came later, and the youngsters were ecstatic. Two guitars, one organ, and a drummer: all that was needed. The music was heard for miles around . . . would you believe for hundreds of feet? Just about everybody danced, young and old. Generation gap? Phooey!

Before you knew it, it was lunch time. Actually, lunch time was **all the time.**

As the choo-choo chugged around and around its trackage (red lights flashing realistically) and Octopus did its thing and the Ferris wheel dutifully made its rounds, out by the softball field was a Safety exhibit presided over by Alex Levine of the Corporate Safety staff. Young fry got a double-kick there: a chance to win a prize and fulfill a dream in the process—squirt a fire extinguisher and, with a well-directed stream, knock down a target.

Ah! At 1 p.m. the kiddie entertainment got under way. There was Pepe the clown, professional chuckle-maker. And Miss Eva, too, an aerialist whose gasp-provoking balancing act (with contortions) made people wonder how she's lived so long. The juggler was no slouch as a balancer, either, and he played with three flaming batons — hot stuff that captured the kids.

Headquarters for woe was Lost and Found, near the ever-busy First Aid station. There Jinny Petruchik of Insurance and Records and Peggy Buxton of General Accounting dispensed comfort to the lost and handled the paging system to proclaim the found.

Many corporate officers checked in during the day, and Clint Towl and Lew Evans said a few words to the throng. Towl asked if everybody was having fun, then suggested a round of applause for D'Errico. Evans praised "the doctors and the nurses, the guards and firemen" and observed that it was more fun being at the picnic than in that "Control Room where I spend some of my time."

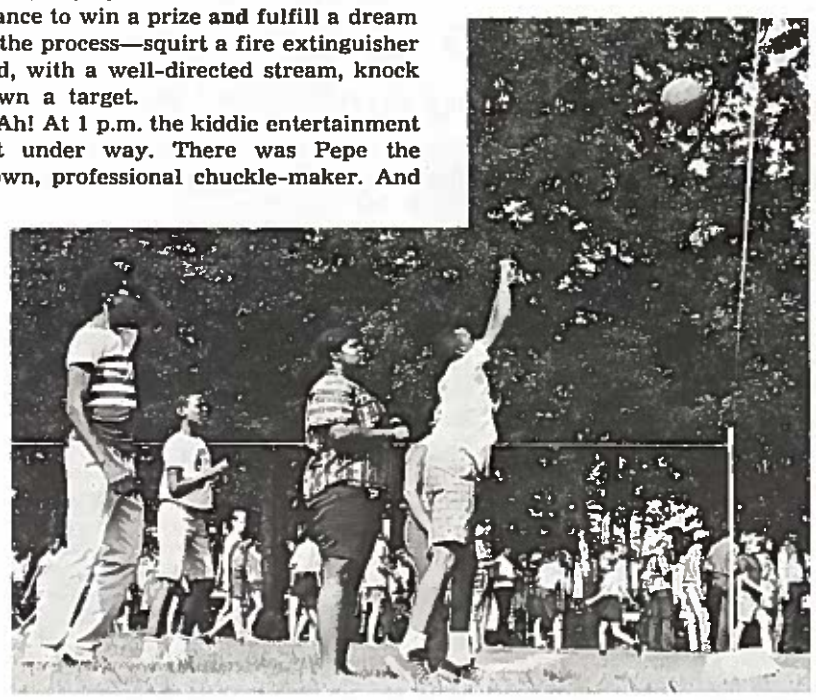
Evans asked Jack McNamara of Facilities, Rozzi, and Augie Walsky to take a bow, then said to the crowd "It's all yours" and melted into the crowd.

Then at 2 p.m., the drums and the bright, sharp notes of brass! The Thunderers were on! They had been well publicized in advance by their business manager, Bill Penza of LM Instrumentation, who pointed out that they are the current world champions and will compete in Milwaukee next month for the right to retain the title.

Jazz is their "thing," but one of the effective marching drills was a s-l-o-w version of "Battle Hymn of the Republic." For their twirling and showy black and red costumes, precision marching and precisely turned corners, the Corps —both junior and senior—drew repeated applause from a warmly appreciative audience.

While the merry-go-round kept its circling pace something else was circling, more wildly, and for the most part, humorously: the Junior Gloves. The wee ones, with gloves that seemed enormous as compared with their limbs and torsos; the slightly larger boys windmiling their way through abbreviated three-rounders; and the even larger lads packing more power (though over-sized gloves and head guards nullified that)—all drew "ooohs" and "aaahs" from the crowd. That's the way it's always been; year after year, it's a very popular event. And a lot of credit is due Johnny Koloski who runs the show. (A note for fans: It's possible that a world's record has been set: All contests invariably end in a draw.)

(Continued on page 6)



Another 'socko' performance . . .

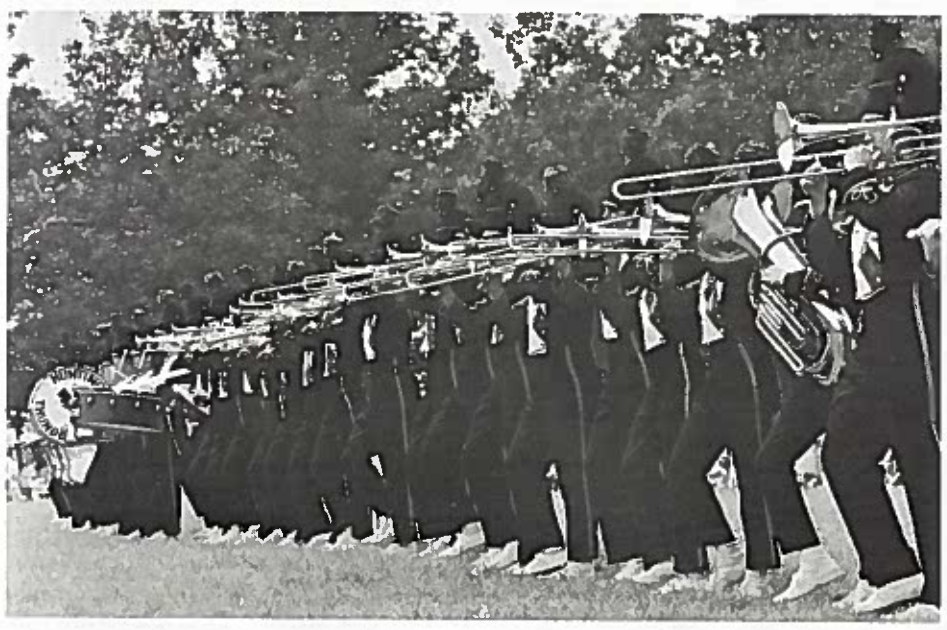
(Continued from page 5)

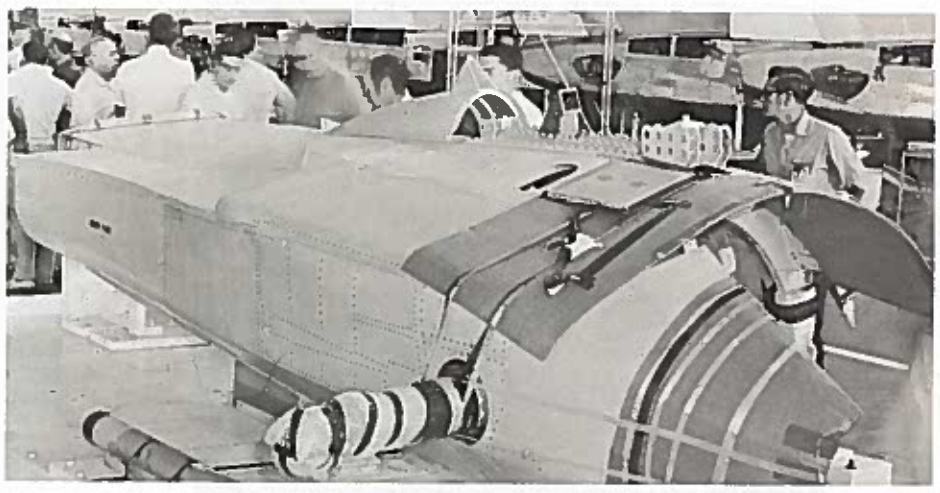
And oh yes! Prizes. There were some of those, too. The grand prize winner turned out to be John Duffus Jr., son of Grummanite who works in Tool Fabrication - Tool & Die at Plant 6, Calverton. That announcement came over the loudspeaker system sometime after 3 p.m., when some of the picnickers, trying to get a jump on traffic, started to pack up for the trip home.

Speaking of traffic, that picnic might not have gone so smoothly, maybe it wouldn't have gone at all, without some first-class, helpful cooperation from the Suffolk County Sheriff's Office, and the Riverhead and State Police departments, who tied in beautifully with Grumman's Plant Protection people.

That leads us to Other Credits Due: Employee Services Office, Facilities, Maintenance, and Medical.

At 4:45, the picnic was officially declared as over. Mass, slow, weary exodus. As one exhausted gal put it, "There won't be any insomniacs tonight."





Plane talk. When the first major assembly completed by an F-14 associate contractor arrived at the Republic plant in Farmingdale July 11, about 50 people were on hand to witness the event. Conferring here on the engine nacelle delivered by Rohr Corp. are Tony Stallone, Julie Sokolow, and Joe Harrison, all of Grumman, and George Hill of Rohr.

Suggestion Office, ESO have some tips on a couple of ways you can 'save' money

Because there is usually a slump in employee suggestions during August, the Project Sterling office is baiting the hook to help this situation by offering double Flight Shop certificates for any approved suggestion received in the Grumman Suggestion Office, Plant 5, next month. This means that the minimum award for any approved suggestion received in August will buy $6 worth of Flight Shop merchandise (lighters, tie tacks, tie bars, compacts, aircraft models).

Get your money-saving, time-saving, safety ideas ready for submission in August. 'Tain't hard. A payroll insert with your July 30 check will remind you of the special double award. Questions? Call the Suggestion Office, Ext. 87311.

ESO can save you $$. Say you want to see the Championship Rodeo at Madison Square Garden in August. You can get $6 tickets for $4.75; $5 tickets for $4, and $4 tickets for $3.50, for evenings of Aug. 6, 11, 13, 14 and matinee Aug. 12. Pick up the discount tickets at any Employee Services office.

Special discount tickets for "Holiday on Ice of 1971," also scheduled for the Garden, and "Sound of Music" at Jones Beach are also available.

About 500 copies of "Our Flag," a brochure that examines the history and tradition of the flag and offers suggestions for its display are now available at Employee Services. The brochures were supplied by S/Sgt. Fred Kernen of the U.S. Marine Corps Recruiting Office in Levittown.

A lucky break . . .

How do we break the news to you, our avid readers? When you linger lovingly over each of our bon mots, savor the flavor of our lucid prose, and, as they say, drink deep drafts from the bottomless reservoirs of Plane News eloquence—well, how do we ease the shock?

There is no way. We give it to you straight (with a prayer that you may weather the storm):

Our next edition won't be out until August 28.

Stiff upper lip, chaps . . . while we're away we may be able to rid ourselves of all that schmaltz above. . . .

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

THOMAS W. THOMAS of Production Control - Parts Control/Major, Plant 1, died July 8 at the age of 51. He lived at 5 Virginia La., Bethpage, and had been with Grumman for 19 years.

WILLIAM J. GILLESPIE JR. died July 13 at the age of 31. He had worked in P/S Support Equipment Services, Plant 80, San Diego, and he had been with Grumman eight years. His home was at 8991 Geraldine Ave., San Diego, Calif.

STANLEY JOHN NOWOSIELSKI JR. died July 18 at the age of 28. He had worked in Propulsion Installation, Plant 5, and had been with Grumman four years. His home was at 125 Terryville Rd., Port Jefferson.

Zots edge Mohawks, 14-13, to snap long slump

It looked like another long afternoon for the Zots. The script, which hadn't varied very much for the past 11 games (except maybe the names changed), seemed to be following the same story line to its inevitable conclusion. The Zots were well on their way to making it an even dozen—all losses—since they joined the Tuesday National loop two years ago.

Then it happened!

Nobody's quite sure what happened, but with the score 11-2 against them, the Zots exploded for 10 runs in the fifth inning to go ahead of the Mohawks. They took another deep draught of that heady ozone and added another in the sixth—and held their breath. Somewhat startled by the Zots turnabout, the Mohawks nevertheless mounted their own offensive. And with two Mohawks in (which tied the score 13-13), and three

Ed Okon
Zots' 'Golden Arm'

more on the bases, the "first" victory for the Zots suddenly seemed farther and farther away.

A pop up ended the threat. Now the Zots had their last chance. They used it well. Loading the bases (although somewhat less auspiciously), the Zots came down to their final out as John Guldner came to the plate. With two strikes against him, Guldner trickled one down the first base line and Ed Okon hurried home with the winning run in a 14-13 thriller.

Mickey Rowles and "Slip" Stinson homered for the Zots in the fifth, while pitcher Ed Okon, who modestly took unto himself the sobriquet of "Golden Arm," collected three hits to aid his own cause.

That was the rise of the Zot dynasty. It fell in the next game. The Zots never did get untracked against Simulation—falling behind 14-0 in the first—and eventually lost 37-4.

Simulation on top

Simulation ran its record to 6-0 in the loop by crushing the Supporters, 18-12, with help from Glenn Spacht's homer. Jim Kelly and Jim Kershan hit for the circuit for the losers. . . . In the Thursday after-hours league, the No Accounts showed that they did amount to something—they clipped Research, 18-12, with Marty Martinez, Bill Masone, and Dom Pagnozzi slamming round trippers. . . . Two hits by Al Beck sparked the Rangers to a 7-2 win over the J-Mets.

The Digits had the last laugh in the Wednesday American league, and caused the Jokers a little grief in the bargain. Bob Schmidt was the big gun in the Digits 6-5 win over the Jokers (the first time in 18 games that the Jokers tasted defeat, as he smacked three hits, including a bases-loaded double and a single that scored the winning run. . . . The Jokers took out their pique on the Sloe Pokes in the next tilt, winning 23-5, with assistance from John Goff and Joe Vosefski. Both Goff and Vosefski slammed five hits each, including homers. . . . In that same round, the Digits clicked off a 7-3 victory over the Marauders, with Nick Agrisano's clout outstanding.

"Enough" cried the CBA Stars—and wouldn't you after losing 14 in a row? And who should be unfortunate enough to be the recipient of that frustrated exclamation? The Heroes, that's who. It was the first win since 1968 for the Stars, and they made it a big one. While amassing 25 hits, they raced to an 18-11 win, with Mickey Long, Elliot Altman, Dick Carbone, Ade Salee, Rudy Polanski, and Bill Bielen the real "heroes." Oh yes, the other Heroes are now 0-5.

The Road Runners stayed just out of reach of the Druids in Monday National play, although they needed one extra inning to accomplish the trick. They won 12-11; that enabled them to stay even with the Monopoles atop the loop with 5-1 marks. The Road Runners' Lenny Marsh tied it with his third hit, setting the stage for teammate Deke Rogers, who knocked in the winning tally against the Druids with a double. . . . In another tilt, Bob Ogilvie went 4 for 4, including a round tripper, to pace the Hits' 8-1 victory over the Plumbers.

Dick Chiafalo smashed a three-run homer as the Vikings dimmed the OAO Stars, 16-12, in a Monday National engagement, but then the Monopoles sunk the Vikings, 18-1,

The Flukes proved it was no fluke in the Tuesday American league as they clipped the Titans, 7-3. The game was highlighted by "brilliant pitching from ace righthander Anthony Rosivini, a solo home-run shot by Jeff Kubrick, heads-up fielding, and timely hitting," said the report. . . . Earlier, the Flukes were hooked, 17-0, by the Woodpeckers as Bill Diercks, Sal Barcia, Stu Kornreich, and Dick LaSala featured a 24-hit barrage. . . . The Woodpeckers, now 5-0, had earlier clipped the Tigers, 17-4, with Diercks and George Cumberland the stars, and the Titans, 11-8, on a three-run shot by Cumberland.

Hoop clinics

What has four wheels, is brand new, is bright red and shiny? Why, a Net nut wagon, of course! And soon, that wagon will be rolling around Grumman plants with a couple of real N. Y. Nets aboard who will give a series of lunch-hour hoop clinics.

Here's the schedule:

Monday, August 17 - Bethpage (rear of Plant 2); Tuesday, August 18 - Plant 36; Wednesday, August 19 - Calverton; Tuesday, August 25 - Plant 33; Wednesday, August 26 - Plant 27; Thursday, August 27 - Plant 34 complex.

Grumman booters set practice slate

If you're looking to get a kick out of life, here's your chance. The Grumman varsity soccer team has scheduled practice sessions every Wednesday, starting July 29, on the playing field north of the Grumman garage on South Oyster Bay Road in Bethpage.

According to Karl Herrnkind, players now on the varsity squad, and all those who would like to try out for the team, are invited to attend the sessions that start at 5 p.m. For more information, contact Herrnkind, Ext. 84181, or Joe Campisi, Ext. 1134.

Kickers' play, softball tourney scheduled in August by GAA

Time's running out for sign-up in the GAA summer golf tournament scheduled for Tuesday, August 11. The 18-hole trial is set for the Blue course at Bethpage State Park, with play to be governed by USGA rules except where local Bethpage rules apply.

The $11 individual entry fee will include greens fee, reserved starting time, individual and kickers' awards, and a buffet dinner following play.

In all, there will be 13 different individual prizes, ranging from low gross and low net awards to those for the longest drives and closest-to-the-pin. There will be special awards for "senior" men, age 50 and over, and for ladies.

Registration for the tourney should be made with Mike Cherry of the GAA staff, Plant 28B, who may be contacted on Ext. 2133 or 2269. Entries will be accepted on a first-come, first-served basis, as the field will be limited to 100 golfers. The first foursome will tee off at 11 a.m.

Kickers' prizes—some might call them consolation prizes—are determined by picking blind scores out of a hat. Your kickers' score will be your gross score, less a Callaway handicap system—and that will be explained by Cherry prior to tee time.

Mixed Pinehurst

Also on the GAA golf calendar in the next couple of weeks is the third Mixed Pinehurst of the season, scheduled for August 26. You can sign up for that one, too, by calling Cherry or a GAA staff member on Ext. 2133 or 2269. You are requested to sign up as a team, $3.50 per person, with greens fee and prize contribution included in that fee.

Test for the best

Research sports a 6-0 record in the Monday night American slow-pitch loop and is the class of the league—but how that team would stack up against some of the other squads in the Grumman lunch-hour and after-work leagues is something else again. Other league leaders include: Monday night National—Monopoles and Road Runners, both at 5-1; Tuesday night American - Woodpeckers, 5-0; Tuesday night National - Simulation, 6-0; Thursday night - Rangers, 6-0; Plant 3 - Commanders, 9-2; and Calverton - Whats Left, 14-3.

Although they are not in the same league, there will be an opportunity for these teams to meet head-to-head shortly to determine who is really the powerhouse in Grumman softball play. On the weekend of August 14-16, the Grumman Athletic Association will sponsor an all-Grumman softball tourney on a double-elimination basis. All teams must be from a Grumman sanctioned league, all members of teams entering the tournament must be on active rosters, and an individual may play with only one team entered in the tourney. Spectators will be allowed. Contact Chet Baumgartner, Ext. 2133, for further information.

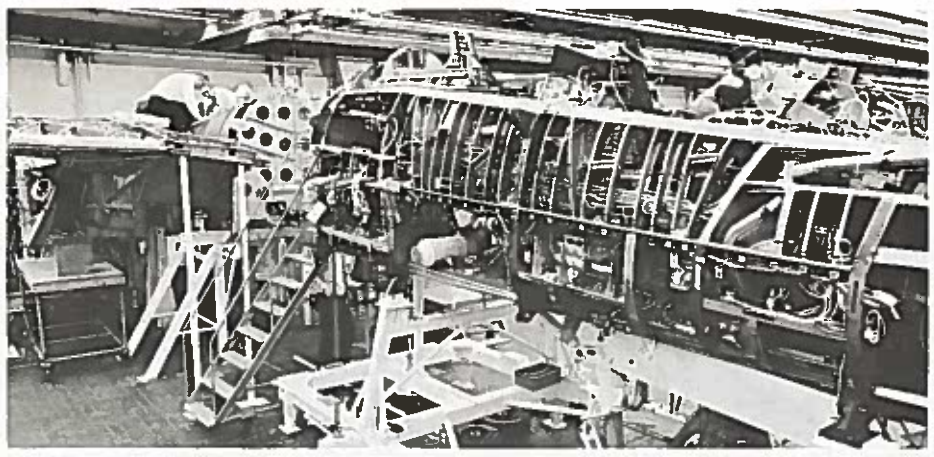
GAA softball tourney

Team ..... League ..... Division .....

Manager ..... Ext. ..... Plant ..... Dept. ..... Perm. .....

We want to play ☐ We do not want to play ☐

Return to GAA, Plant 28B
Entry deadline - July 30



(F-14 photos by Carl Lassig)

Men and the machine

(Continued from page 1)

Some guys, like Les Hanak of Fluid Power and Fred Zeisner of Instrumentation (among others), have piled up 30 years of experience. That's a lot of know-how. Hanak broke in at the router room in Plant 1, later shifted to hydraulics in Plant 2 for a run of F-7s and 8s. He worked on all the Panthers. (First flight of the Panther came in 1947 with Corky Meyer, now a Vice President, at the controls.) "I was on S-2F, WF-2, W2F, F-11F, Hawkeye, A-6, F-111 . . . a lot o' them. Biggest difference between the old days and now? Well, I guess the modular idea and the way everything is set out — this goes first, then you do that, all the way along the line."

Zeisner looks at matters pretty much the same way. A veteran of the Wildcat, F-6, F-8, F-11, W2F and WF-2, A-6, HU-16, and both Gulfstream I and II—in fact, "on every first ship since I came to Grumman," he ticked off five items as innovations: the modular concept, F-14's exceptional accessibility, the packaged work kits, engine development, and design of the swept wing. None of these is strictly new, but each is a forward step, and the five together pack a mighty punch.

Like the others on the F-14 program, he's itchy to get things moving faster. That's just one sign of a real pro.

The quick-step approach is certainly not the province of the long-term Grummanites alone. Take a "youngster" like George Faeth, who's foreman of Electrical Installation. To be a jump ahead is the way Faeth likes it, and with EMMA, the Engineering Mockup and Manufacturing Aid, he's got that jump.

"We started with EMMA in mid-January," Faeth says, "and finished ship Number One in June. Now we're on ship Four, the one with all the electronics. We'll be working with her through September. Later, EMMA will be used for ECPs (Engineering Change Proposals). She'll be around for quite a while."

EMMA is not a toy or a frill; it's an essential in the production race. "Even though it's built for a "fictitious" flight, it can be thought of as a Production-Engineering-Tooling enforcer: It makes everyone work together more closely because all you have to do is look at EMMA to know where you stand. You see on EMMA whether the initial drawings work out in practice, whether you've got the right clearances for wire runs, black boxes, and so on. By using it, you force integration of systems engineering into the actual available space. Most of all, you prevent confusion and havoc."

That's a lesson Faeth learned well during his almost six years as a foreman on the Lunar Module program: Run by rigid specs and always make more test-checks than seem necessary. About three years of work on the OAO (Orbiting Astronomical Observatory) before he went to the LM contributed heavily to his do-it-right outlook.

It's interesting, too, that Faeth's avenue of action differs significantly from Gazzola's, and that **both** are needed. To Faeth, "production can be monotonous. For me, each day has to be a new experience, so I like being on budding projects." Gazzola's view? "I go nuts over this program. I really wanted to be on this one because we own the plane and it's our design. I want to be at the end of the line, getting it ready to fly. What a sense of accomplishment that'll be!"

Two men, two views, one complementing the other. Prior to both is the initial sketching, after both is Fleet performance, maintenance, spares . . . It's a lot to handle.

'New breed'

There are, in fact, as many views as there are people, no doubt more. And these judgments come not exclusively from Grummanites with long service, but from the "new breed" as well—people who may be short in terms of years but long in terms of interest, skills, and performance. A case in point is Jim Brienza of Major Assembly who has five years with the Company, part of it on the Gulfstream I and II.

"I was in at the start—before the start, in a way: I was on the crew that helped get Plant 1 ready for the F-14. Same as with Tony (Prastano) here. The two of us were running back and forth between Plant 1 and Calverton, workin' on the inlet ducts. The ducts were simulated, but the Pratt and Whitney engine wasn't—and that's a darn good engine."

"It just took a little modification work," comments Prastano. For him, it was like a case of fine-tuning, and he predicts that the F-14 "will be an easy aircraft to build once we get going."

Chet Andrews, foreman in Final Assembly, talks about that and reveals some of the theory and practice as seen from the production side:

"As far as I know, this is the first time that the Company went about building a plane in a way that got just about everybody in on the work at the start, or darned close to the start. As the aircraft was in design, Grumman set up a Producibility Team made up of key functional areas—Engineering, Cost Estimating, Tooling, Production, Methods, Industrial Engineering, Manufacturing, Quality Control. I was a member of that team. Each had his say. It helped us in hardware and tooling, and it made for a better plane that'll be easier to build."

Then, too, the "new approach" stimulated improved performance. Twenty-five-year-man Jim Wapniarski, a structural mechanic, said it made his job "more of a challenge. You really have to watch yourself, make sure you're careful, 'cause when you're working with titanium and you make a mistake you might have to throw away a piece—and that would cost a lot of money."

A principal cost saver, and time saver, was EMMA itself because that permitted stuffing operations to be done at the same time that the structure was being fabricated. Before EMMA got into the act, the stuffing (electrical installation) job had to wait until the structural work had been completed. So EMMA is really an efficient gal.

Efficiency, in fact, could well be the hallmark of all F-14 goals, and when that's the aim and there are fast-movers—really keyed up people who are always chomping at the bit—the **job will** get done. Two guys who fit that mold are Joe Lengyel of Final Assembly and Bill (Hockey) Swamback. If they had it their way, they'd cut through the paperwork (or maybe even bypass it) and get to what they see as the guts of the job. "All shop people want to build," Hockey says. "They want to get at the hardware."

Lengyel concurs, noting that "Paper doesn't put a plane together." Yet, he'll agree that that may be overstated and the paper plan is really a good anchor and route-marker. He and Hockey are just a bit impatient . . . although both admit that building the first aircraft of a new line is the time-consumer **and** that F-14 Number One is further along the production trail than any other first aircraft they've handled.

How far along? Well, the first, F-14 will be at Calverton in mid-October and there's an expectation that the contractual first-flight date of January '71 is going to be beaten by a month.

That's fast action, and it's happening all the way down the line. There've been time trials of a sort already. For example, Al Pucci of Power Plant says that his gang has been "rehearsing" the job of taking an engine out and putting in a new one. "We do it in 30 to 45 minutes on the contractual mockup. Of course, it'll take longer when we're working on the real thing, but I know it'll be done fast."

That spirit of confidence pervades Plant 1 production.

And that's the view of Bill McLean, recently named Plant 1 manager. "In the couple of weeks that I've been here I've seen lots of enthusiasm. The paperwork is working for us, people accept the new way of operating and see its value, and there's the unmistakable air of success. I'd bet on a December first flight."